From infomet at embarqmail.com Tue Oct 2 21:51:29 2012
From: infomet at embarqmail.com (Wilson Lamb)
Date: Tue, 2 Oct 2012 21:51:29 -0400 (EDT)
Subject: [BoatAnchors] Vidicon
In-Reply-To:
<1178173196.2110970.1349229068421.JavaMail.root@md17.embarq.synacor.com>
Message-ID:
<1699367974.2110987.1349229089703.JavaMail.root@md17.embarq.synacor.com>

Anyone know what a Hitachi Vidicon 7735A is?

Wilson

W4BOH

From esieb at sympatico.ca Tue Oct 2 22:40:11 2012
From: esieb at sympatico.ca (Ed Sieb)
Date: Tue, 2 Oct 2012 22:40:11 -0400
Subject: [BoatAnchors] Vidicon
In-Reply-To:
<1699367974.2110987.1349229089703.JavaMail.root@md17.embarq.synacor.com>
References:
<1178173196.2110970.1349229068421.JavaMail.root@md17.embarq.synacor.com>
     <1699367974.2110987.1349229089703.JavaMail.root@md17.embarq.synacor.com>
Message-ID: <BLU0-SMTP31F0351CAA43B47A4C829FC9850@phx.gbl>

Standard 1" vidicon as used in many CCTV cameras.

-----Original Message-----
From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Wilson
Lamb
Sent: Tuesday, October 02, 2012 9:51 PM
To: boatanchors
Subject: [BoatAnchors] Vidicon

Anyone know what a Hitachi Vidicon 7735A is?

Wilson

W4BOH

https://minime.theporch.com/mailman/listinfo/boatanchors

From w4rl at bellsouth.net Thu Oct 4 01:22:21 2012
From: w4rl at bellsouth.net (Robert Lawson)
Date: Thu, 04 Oct 2012 00:22:21 -0500
Subject: [BoatAnchors] RAECO 1601 Transformer
Message-ID: <506D1D0D.5080204@bellsouth.net>

Fellas,

I've a small RAECO 1601 transformer that I found while attempting to clear out some items from my garage today. It measures 1.5 inches wide (minus the mounting tabs with holes) and 1.25 inches high. Two I presume input wires and four output wires. The two output center wires are paired together with a solder joint on their ends probable by me circa early 70's.

So if someone could identify this transformer's spec data, I could possibly try and figure what in the Sam Hill I was going to do with it 40 years ago. Yes, I admit I need assistance on these two accounts. And I'm told several others things having absolutely nothing to do with ham radio as my bride of 42 years tells me this often. Sometimes very often I'm afraid. <grin>

Thanks

Robert W4RL

--

"IF YOU CAN'T FIX IT WITH A HAMMER, YOU'VE GOT AN ELECTRICAL PROBLEM."

"PEACE IS THAT BRIEF MOMENT IN TIME WHEN EVERYBODY STANDS AROUND RELOADING."

"YOU ONLY NEED TWO TOOLS IN LIFE - WD-40 AND DUCT TAPE. IF IT DOESN'T MOVE AND SHOULD, USE THE WD-40. IF IT SHOULDN'T MOVE AND DOES, USE THE DUCT TAPE."

From imaham at sbcglobal.net Tue Oct 9 15:18:54 2012
From: imaham at sbcglobal.net (Jim Allen)
Date: Tue, 9 Oct 2012 12:18:54 -0700
Subject: [BoatAnchors] Dynamotor Rebuild/Lube?
Message-ID: <370B4A32-BA35-488B-BE2E-F49F85D7451B@sbcglobal.net>

Hi,

I've got an old military receiver that has a dynamotor in it. The dynamotor works, and doesn't seem to make a lot of noise. I have no experience with these devices so am wondering if I need to take it apart and do some kind of maintenance on it. Greasing the bearings, etc. seems a bit daunting. Can I get away with a little oil here and there or do I need to do the full monty? It is a 1950's vintage set and I don't know if the previous owner ever did anything to the dynamotor.

Any thoughts would be appreciated.

Regards,

Jim

NU6AM

From imaham at sbcglobal.net Wed Oct 10 12:09:36 2012
From: imaham at sbcglobal.net (Jim Allen)
Date: Wed, 10 Oct 2012 09:09:36 -0700
Subject: [BoatAnchors] Dynamotor Rebuilder?
Message-ID: <13B9C26D-BB2F-49AA-B2B9-AA684F33D5D7@sbcglobal.net>

Hi,

After looking at the material provided by other Boatanchor members (much thanks), I'm no sure I want to attempt a rebuild.   Is there any company/person out there that will rebuilt a dynamotor for a fee? It's in a R-648 receiver.

Best,

Jim

NU6AM

From arc5 at ix.netcom.com Wed Oct 10 14:46:56 2012
From: arc5 at ix.netcom.com (arc5 at ix.netcom.com)
Date: Wed, 10 Oct 2012 18:46:56 +0000
Subject: [BoatAnchors] Dynamotor Rebuilder?
Message-ID: <20121010184656.19B2147F043@attemconn01.jsv.hosting.ops>

Anyone got pics / specs on this dyno? Never heard of that one so don't know if I can help..

Sent from AT&T Wireless using Mobile Email

------Original Message------
From: Jim Allen <imaham at sbcglobal.net>
To: "Old Tube Radios" <boatanchors at theporch.com>,"Jim Allen" <imaham at sbcglobal.net>
Date: Wednesday, October 10, 2012 9:09:36 AM GMT-7
Subject: [BoatAnchors] Dynamotor Rebuilder?

Hi,

After looking at the material provided by other Boatanchor members (much thanks), I'm no sure I want to attempt a rebuild. Is there any company/person out there that will rebuilt a dynamotor for a fee? It's in a R-648 receiver.

Best,

Jim

NU6AM

From wb3fau55 at neo.rr.com Wed Oct 10 16:17:45 2012
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)
Date: Wed, 10 Oct 2012 16:17:45 -0400
Subject: [BoatAnchors] Dynamotor Rebuilder?
In-Reply-To: <20121010184656.19B2147F043@attemconn01.jsv.hosting.ops>
Message-ID: <20121010201745.LLYSO.11121.root@cdptpa-web05-z02>

hey Jim, maybe consider building up a power supply?
---- "arc5 at ix.netcom.com" <arc5 at ix.netcom.com> wrote:
> Anyone got pics / specs on this dyno? Never heard of that one so don't know if I can help..
>
> ---
> Sent from AT&T Wireless using Mobile Email
>

> ------Original Message------
> From: Jim Allen <imaham at sbcglobal.net>
> To: "Old Tube Radios" <boatanchors at theporch.com>,"Jim Allen" <imaham at sbcglobal.net>
> Date: Wednesday, October 10, 2012 9:09:36 AM GMT-7
> Subject: [BoatAnchors] Dynamotor Rebuilder?
>
> Hi,
>
> After looking at the material provided by other Boatanchor members (much thanks), I'm no sure I want to attempt a rebuild. Is there any company/person out there that will rebuilt a dynamotor for a fee? It's in a R-648 receiver.
>
> Best,
>
> Jim
>
> NU6AM
>
>
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

From gumbear at pacbell.net Wed Oct 10 16:21:03 2012
From: gumbear at pacbell.net (Arden Allen)
Date: Wed, 10 Oct 2012 13:21:03 -0700
Subject: [BoatAnchors] Dynamotor Rebuild/Lube?
References: <370B4A32-BA35-488B-BE2E-F49F85D7451B@sbcglobal.net>
Message-ID: <001201cda724$cde04260$650aa8c0@KB6NAX>

Jim asks:

> I've got an old military receiver that has a dynamotor in it. The dynamotor works, and doesn't seem to make a lot of noise. I have no experience with these devices so am wondering if I need to take it apart and do some kind of maintenance on it. Greasing the bearings, etc. seems a bit daunting. Can I get away with a little oil here and there or do I need to do the full monty? It is a 1950's vintage set and I don't know if the previous owner ever did anything to the dynamotor.

Back in the Mesozoic era of my career I made car payments by repairing appliances and tools that contained universal motors, such as skill saws, drill motors, etc. Dynamotors are built much like the common universal motor. They contain mounted on a common shaft an armature consisting of windings on a laminated magnetic structure with a segmented commutator ring to pass current to and fro via carbon brushes in reaction with the magentic field from the fixed stator windings. A dynamotor is simply a motor-generator, i.e., a generator and motor combined together. The most frequent life ending mechanism is the shorting of turns between windings caused by heat embrittled insulation and the effects of vibration and expansion-contraction over many hours of operation. The first item to wear out is the carbon brushes which require replacement. Usually the servicing of a universal motor or dynamotor consists of cleaning out the gaps between the commutator ring segments and seating the new brushes. Sealed bearings if very old or showing signs of wear out by the noise they produce need to be pulled from the shaft ends and new bearings pressed on. Open bearings can be repacked with an appropriate motor bearing grease which, offhand, I have no product recommendation for. By all means do not use a metal containing lubricant such as molybdenum bearing grease from your local auto supply store. Others may make a recommendation for the proper type of grease to use. Do not oil the dynamotor as oil gets burnt leading to fouling of the commutator gaps. Simple dynamotor maintenance consists of visually inspecting the brushes for wear and blowing the dust out with compressed air.

Arden Allen
KB6NAX

If you pick up a starving dog and
make him prosperous, he will not
bite you. This is the principle
difference between a dog and
a man. -Mark Twain

From wf2u at ws19ops.com Wed Oct 10 17:30:08 2012
From: wf2u at ws19ops.com (Meir WF2U)
Date: Wed, 10 Oct 2012 17:30:08 -0400
Subject: [BoatAnchors] Dynamotor Rebuild/Lube?
In-Reply-To: <370B4A32-BA35-488B-BE2E-F49F85D7451B@sbcglobal.net>
References: <370B4A32-BA35-488B-BE2E-F49F85D7451B@sbcglobal.net>
Message-ID: <45C3E11BA78641B9904735B80751C126@MBDCONSULTING.LOCAL>

Jim,

I run all my military radios with their original dynamotors. When I get a

radio, I inspect the dynamotor for dirt/arcing in the brushes/commutator, inspect the brush lengths and inspect the bearings. I clean the carbon dust, clean the bearings and then repack it with lithium grease. I never found a dynamotor (so far) which had completely dry and gunked up grease in the bearings. No need for disassembly/rebuilding is necessary in most cases, especially when the dynamotor runs quietly from the get-go; cleaning and relubing is adequate. Anybody can do those - your mileage may vary, as they say...

Anyone who suggests to build a power supply to replace the dynamotor is not aware of the value (intrinsic and monetary) of an original, unmodified military classic.

There is one thing which can be done to replace the dynamotor in the R-648's which are usually missing the dynamotor - without modifying anything in the radio - is to buy the solid-state power supply module from the surplus ARC-51 UHF transceiver (Fair Radio has them for $25). With a slight modification to the power supply, mounting it on a baseplate to match the dynamotor unit chassis, and the addition of the voltage regulator tube to duplicate that of the original dynamotor it's plug-and play, with the same 28VDC input as with the dynamotor. BTW this supply works great in the BC-348 as well and fits nicely, as it's smaller than the original dynamotor. I use it in BC-348's where the dynamotor is missing. You can see such a usage in an R-648 here: http://staff.salisbury.edu/~rafantini/ARR41modifications.htm
.

Good luck and enjoy the radio!

73, Meir WF2U
Landrum, SC

-----Original Message-----
From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Jim Allen
Sent: Tuesday, October 09, 2012 3:19 PM
To: Old Tube Radios
Subject: [BoatAnchors] Dynamotor Rebuild/Lube?

Hi,

I've got an old military receiver that has a dynamotor in it. The dynamotor works, and doesn't seem to make a lot of noise. I have no experience with these devices so am wondering if I need to take it apart and do some kind of maintenance on it. Greasing the bearings, etc. seems a bit daunting. Can I get away with a little oil here and there or do I need to do the full monty? It is a 1950's vintage set and I don't know if the previous owner ever did anything to the dynamotor.

Any thoughts would be appreciated.

Regards,

Jim

NU6AM

From bluegrassdakine at hotmail.com Sat Oct 13 20:12:54 2012
From: bluegrassdakine at hotmail.com (Raymond Cote)
Date: Sat, 13 Oct 2012 19:12:54 -0500
Subject: [BoatAnchors] Microphones
Message-ID: <BAY401-EAS2419D19D4BCFDF872C41810A9720@phx.gbl>

I have a couple mics that I got fr mil surplus and all I can find on them is be 100 to 10k BW, and it says imp of 150 ohms. Other discussions on these lists state that some radios are hi z and some are low z. What is or what are the common accepted input req for mics? I should know but my bench has been stored away for a few years and I am fuzzy on this.
Thanks

Raymond Cote
1466 Townline Rd
Steward Ill 60553
808-341-8213
"""""""""""""""""""""""""""""""""""
Human beings are passionately attached to their beliefs by interests
that have nothing to do with the truth.

From spr at earthlink.net Sun Oct 14 11:50:34 2012
From: spr at earthlink.net (Scott Robinson)
Date: Sun, 14 Oct 2012 08:50:34 -0700
Subject: [BoatAnchors] Microphones
In-Reply-To: <BAY401-EAS2419D19D4BCFDF872C41810A9720@phx.gbl>
References: <BAY401-EAS2419D19D4BCFDF872C41810A9720@phx.gbl>
Message-ID: <507ADF4A.7030901@earthlink.net>

HI rya,

Vintage microphones are of four types:

Carbon mics, which require a current through them to work since they are variable resistors, not voltage generators. These are not common outside of military gear.

Dynamic mics are somewhat more expensive but hard to break. These can have various impedances, usually either 150-600 ohms or about 50K ohms, depending on the internal transformer.

Crystal mics, always high impedance as they are capacitive sources of medium capacitance.

Condenser mics, quite expensive and only used in music recording and a few broadcast applications. These are always low impedance (1560-600 ohms) since they have an internal cathode follower tube to buffer the very small capacitance of the actual microphone and it's always followed by an output transformer.

A 150 ohm mic will require an input matching transformer (usually 150 ohm to 50K ohm) to work with tube speech amps.

Peace,

Scott

On 10/13/12 5:12 PM, Raymond Cote wrote:
> I have a couple mics that I got fr mil surplus and all I can find on them is be 100 to 10k BW, and it says imp of 150 ohms. Other discussions on these lists state that some radios are hi z and some are low z. What is or what are the common accepted input req for mics? I should know but my bench has been stored away for a few years and I am fuzzy on this.
> Thanks
>
> Raymond Cote
> 1466 Townline Rd
> Steward Ill 60553
> 808-341-8213
> """""""""""""""""""""""""""""""""""""
> Human beings are passionately attached to their beliefs by interests
> that have nothing to do with the truth.
> ____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>

From mike at oldaudio.net Sun Oct 14 13:09:44 2012

From: mike at oldaudio.net (Mike Durff)
Date: Sun, 14 Oct 2012 10:09:44 -0700 (PDT)
Subject: [BoatAnchors] microphones
Message-ID: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>

Just for grins... does anybody remember the question (and answer) on the FCC exam about the proper way to "rejuvenate" a carbon mic?

From broehrig at aurora.edu Sun Oct 14 13:21:59 2012
From: broehrig at aurora.edu (Robert Roehrig (K9EUI))
Date: Sun, 14 Oct 2012 12:21:59 -0500 (CDT)
Subject: [BoatAnchors] Microphones
In-Reply-To: <507ADF4A.7030901@earthlink.net>
Message-ID: <1204936290.24932441.1350235319586.JavaMail.root@mars.aurora.edu>

>
> On 10/13/12 5:12 PM, Raymond Cote wrote:
> > I have a couple mics that I got fr mil surplus and all I can find
> > on them is be 100 to 10k BW, and it says imp of 150 ohms. Other
> > discussions on these lists state that some radios are hi z and
> > some are low z. What is or what are the common accepted input req
> > for mics? I should know but my bench has been stored away for a
> > few years and I am fuzzy on this.
> > Thanks

They are probably dynamics. It seems to me that most HF rigs are HI-Z (15K to 60K) and VHF rigs are medium-z (500-1000 ohms).

You will need a matching transformer to use them in any case.

K9EUI

From w5sum at comcast.net Sun Oct 14 13:32:17 2012
From: w5sum at comcast.net (Ronnie Hull)
Date: Sun, 14 Oct 2012 12:32:17 -0500
Subject: [BoatAnchors] microphones
In-Reply-To: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
References: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
Message-ID: <762A238E-0FF5-4C79-9C90-9B4FB5F590C7@comcast.net>

Rapping it hard on a hard surface

Sent from Ronnie's IPhone

On Oct 14, 2012, at 12:09 PM, Mike Durff <mike at oldaudio.net> wrote:

> Just for grins... does anybody remember the question (and answer) on the FCC exam about the proper way to "rejuvenate" a carbon mic?
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

From kd5byb at kd5byb.net Sun Oct 14 13:45:09 2012
From: kd5byb at kd5byb.net (Ben Hall)
Date: Sun, 14 Oct 2012 12:45:09 -0500
Subject: [BoatAnchors] microphones
In-Reply-To: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
References: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
Message-ID: <507AFA25.2020002@kd5byb.net>

Hi Mike and gang,

Don't you rap them on a hard surface to break up the "caked up" granules
or something like that?

thanks,
ben

On 10/14/2012 12:09 PM, Mike Durff wrote:
> Just for grins... does anybody remember the question (and answer)
> on the FCC exam about the proper way to "rejuvenate" a carbon mic?

From w4rl at bellsouth.net Sun Oct 14 13:51:22 2012
From: w4rl at bellsouth.net (Robert Lawson)
Date: Sun, 14 Oct 2012 12:51:22 -0500
Subject: [BoatAnchors] microphones
In-Reply-To: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
References: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
Message-ID: <507AFB9A.8060706@bellsouth.net>

On 10/14/2012 12:09 PM, Mike Durff wrote:
> Just for grins... does anybody remember the question (and answer) on the FCC exam about the proper way to "rejuvenate" a carbon mic?
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

>

From w4rl at bellsouth.net Sun Oct 14 13:52:13 2012
From: w4rl at bellsouth.net (Robert Lawson)
Date: Sun, 14 Oct 2012 12:52:13 -0500
Subject: [BoatAnchors] microphones
In-Reply-To: <507AFB4F.3010701@bellsouth.net>
References: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
    <507AFB4F.3010701@bellsouth.net>
Message-ID: <507AFBCD.2080305@bellsouth.net>

On 10/14/2012 12:50 PM, Robert Lawson wrote:
> A little brush-n-touch with a high density mass (metal) object? <grin>
>
> Robert W4RL
>
>
> On 10/14/2012 12:09 PM, Mike Durff wrote:
>> Just for grins... does anybody remember the question (and answer) on the FCC
exam about the proper way to "rejuvenate" a carbon mic?
>> _____
>> BoatAnchors mailing list
>> BoatAnchors at theporch.com
>> https://minime.theporch.com/mailman/listinfo/boatanchors
>>
>

From w7qho at aol.com Sun Oct 14 13:52:18 2012
From: w7qho at aol.com (mac)
Date: Sun, 14 Oct 2012 10:52:18 -0700
Subject: [BoatAnchors] microphones
In-Reply-To: <762A238E-0FF5-4C79-9C90-9B4FB5F590C7@comcast.net>
References: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
    <762A238E-0FF5-4C79-9C90-9B4FB5F590C7@comcast.net>
Message-ID: <67D4F28A-F36F-46D1-8B00-44B772430F15@aol.com>

Never had much luck with that on old military mics (T-17, RS-38, etc),
once crapped out usually stayed crapped out. Old F-1 buttons and the
like seem to last forever, though. My experience FWIW.

Dennis D. W7QHO
Glendale, CA

****
On Oct 14, 2012, at 10:32 AM, Ronnie Hull wrote:

> Rapping it hard on a hard surface
>
> Sent from Ronnie's IPhone
>
> On Oct 14, 2012, at 12:09 PM, Mike Durff <mike at oldaudio.net> wrote:
>
>> Just for grins... does anybody remember the question (and answer)
>> on the FCC exam about the proper way to "rejuvenate" a carbon mic?
>> _____

From esieb at sympatico.ca Sun Oct 14 13:59:52 2012
From: esieb at sympatico.ca (Ed Sieb)
Date: Sun, 14 Oct 2012 13:59:52 -0400
Subject: [BoatAnchors] Microphones
In-Reply-To: <1204936290.24932441.1350235319586.JavaMail.root@mars.aurora.edu>
References: <507ADF4A.7030901@earthlink.net>
     <1204936290.24932441.1350235319586.JavaMail.root@mars.aurora.edu>
Message-ID: <BLU0-SMTP6663DBFB567B61C4CACACCC9720@phx.gbl>

Since about the mid-'80's, most radios are lo-Z (~600 ohms). Prior to about the mid-'80's, all HF radios were hi-Z (50,000 k ohms).   All the tube-type rigs were definitely hi-Z, including the later hybrids (FT-101 series, TS520/820, etc). To my best recollection,   the very early amateur VHF radios were also hi-Z, but later changed over to lo-Z (later ICOM, Yaesu, Kenwood).   Today, virtually all radios HF, VHF, etc. are all lo-Z.

From w9ac at arrl.net Sun Oct 14 14:10:20 2012
From: w9ac at arrl.net (Paul Christensen)
Date: Sun, 14 Oct 2012 14:10:20 -0400
Subject: [BoatAnchors] Hi-Z Probe for Modern DMMs
Message-ID: <B1EF1F620E0846AFB7B43EDE26148B3F@DBTOA000>

Anyone know of a commercially manufactured switchable Hi-Z probe for use with modern DMM sets, like the Fluke series where separate, insulated banana plugs are used? If not, I'll likely end up cannibalizing an RCA or Simpson probe with shielded cable, then terminate with new insulated plugs at the end. Without a 1-meg resistor at the probe end and shielded cable, accuracy of grid measurements is a disaster.

Paul, W9AC

From mike at oldaudio.net Sun Oct 14 14:29:43 2012
From: mike at oldaudio.net (Mike Durff)
Date: Sun, 14 Oct 2012 11:29:43 -0700 (PDT)
Subject: [BoatAnchors] microphones
Message-ID: <1350239383.62029.YahooMailNeo@web5713.biz.mail.ne1.yahoo.com>

Yes, I think rapping against a hard surface works, as I have done this many times with the?carbon mic?in most WE manufactured Bell telephones. This almost a necessity in a phone booth...remember those??
In my opinion, heating it under a lamp would be the more civil solution...
MD

From mike at oldaudio.net Sun Oct 14 16:45:09 2012
From: mike at oldaudio.net (Mike Durff)
Date: Sun, 14 Oct 2012 13:45:09 -0700 (PDT)
Subject: [BoatAnchors] Hi-Z Probe for Modern DMMs
Message-ID: <1350247509.23429.YahooMailNeo@web5702.biz.mail.ne1.yahoo.com>

How about a scope probe set? Most are terminated in BNC, but easy enough to get a BNC to banana male adapter.?
?Switchable X1 or X10 or ref ?$35 on ebay...

From franklin6209 at att.net Mon Oct 15 11:54:37 2012
From: franklin6209 at att.net (Gary Franklin)
Date: Mon, 15 Oct 2012 11:54:37 -0400
Subject: [BoatAnchors] HT-32B Problem
Message-ID: <507C31BD.1050602@att.net>

I have a HT-32B which has the following problem .... When I spot the transmitter frequency and transmit in the USB mode it is right on. When I change to the LSB mode the output is about 6 kc below the spotting frequency. I can't say I fully understand the SSB generation scheme used in this transmitter but I suspect that the 13950 kc crystal in the sideband switching oscillator circuit in the SSB generator is off by about 6 kc. Before I look for a xtal can does anyone concur with the diagnosis??

Gary , K8BKB

From wb3fau55 at neo.rr.com Mon Oct 15 17:26:53 2012
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)
Date: Mon, 15 Oct 2012 17:26:53 -0400
Subject: [BoatAnchors] microphones

In-Reply-To: <1350234584.40249.YahooMailNeo@web5714.biz.mail.ne1.yahoo.com>
Message-ID: <20121015212654.EGSSG.25130.root@cdptpa-web06-z01>

I don't know the FCC answer, but the correct answer is just to rap it on a hard surface, like a table top,
this looosens the carbon granules-HI
---- Mike Durff <mike at oldaudio.net> wrote:
> Just for grins... does anybody remember the question (and answer) on the FCC exam about the proper way to "rejuvenate" a carbon mic?
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

From CBRENNER at uwec.edu Mon Oct 15 22:40:48 2012
From: CBRENNER at uwec.edu (Brenner, Charles J.)
Date: Tue, 16 Oct 2012 02:40:48 +0000
Subject: [BoatAnchors] Powerstat (variac type) variable autotransformer
     question
Message-ID: <3B2C101E19CBC240B031AA79D40D2BED6166446F@EX2010-MBX2.uwec.edu>

I picked up for $3 at a flea market a Powerstat variable autotransformer. Input is 240V output is 0-280 volts @3.5 amps. KVA is .98. The unit is wired with the standard 220V plug and receptacle. Is there any reason that I couldn't just change the plug and receptacle to a standard 120V configuration and go ahead and use it? Obviously the dial calibration will reflect the 240 input but that is easily compensated for. It would seem to me that as a transformer it wouldn't care if it were looking at 120 or 240? Am I missing something? What about the current capacity and KVA rating at 120V?

Thanks in advance for your thoughts and insight.

Chuck Brenner, WB9GJW

From gumbear at pacbell.net Mon Oct 15 23:32:10 2012
From: gumbear at pacbell.net (Arden Allen)
Date: Mon, 15 Oct 2012 20:32:10 -0700
Subject: [BoatAnchors] Powerstat (variac type) variable
     autotransformerquestion
References: <3B2C101E19CBC240B031AA79D40D2BED6166446F@EX2010-MBX2.uwec.edu>
Message-ID: <001f01cdab4f$81cec430$650aa8c0@KB6NAX>

Chuck queeries:

> I picked up for $3 at a flea market a Powerstat variable autotransformer. Input is 240V output is 0-280 volts @3.5 amps. KVA is .98. The unit is

wired with the standard 220V plug and receptacle. Is there any reason that I couldn't just change the plug and receptacle to a standard 120V configuration and go ahead and use it? Obviously the dial calibration will reflect the 240 input but that is easily compensated for. It would seem to me that as a transformer it wouldn't care if it were looking at 120 or 240? Am I missing something? What about the current capacity and KVA rating at 120V?

A 240 variac operating on 120 volts will work just about as well as a 120 variac. There is some more loss due to the increased resistance of a few more turns and perhaps the core is not optimal for operating at less excitation. Give it a try and report back.

Arden Allen
KB6NAX

If you get to thinking you're a person of
some influence, try ordering somebody
else's dog around. -Will Rogers

From WA5CAB at cs.com Tue Oct 16 00:41:18 2012
From: WA5CAB at cs.com (WA5CAB at cs.com)
Date: Tue, 16 Oct 2012 00:41:18 -0400 (EDT)
Subject: [BoatAnchors] Powerstat (variac type) variable
     autotransformerquestion
Message-ID: <5495c.357b8383.3dae3f6d@cs.com>

And KVA rating will be approximately halved. I say approximately because the no-load input current will be halved so it will run a little bit cooler at no-load. But priimary losses at full load will be slightly higher than in one wound for 120V input.

In a message dated 10/15/2012 22:39:14 PM Central Daylight Time,
gumbear at pacbell.net writes:
> Chuck queeries:
>
> >I picked up for $3 at a flea market a Powerstat variable autotransformer.
> Input is 240V output is 0-280 volts @3.5 amps. KVA is .98. The unit is
> wired with the standard 220V plug and receptacle. Is there any reason
> that
> I couldn't just change the plug and receptacle to a standard 120V
> configuration and go ahead and use it? Obviously the dial calibration
> will
> reflect the 240 input but that is easily compensated for. It would seem
> to
> me that as a transformer it wouldn't care if it were looking at 120 or

> 240?
> Am I missing something? What about the current capacity and KVA rating at
> 120V?
>
> A 240 variac operating on 120 volts will work just about as well as a 120
> variac. There is some more loss due to the increased resistance of a few
> more turns and perhaps the core is not optimal for operating at less
> excitation. Give it a try and report back.
>
> Arden Allen
> KB6NAX
>
>

Robert Downs - Houston
wa5cab dot com (Web Store)
MVPA 9480

From gumbear at pacbell.net Tue Oct 16 01:01:16 2012
From: gumbear at pacbell.net (Arden Allen)
Date: Mon, 15 Oct 2012 22:01:16 -0700
Subject: [BoatAnchors] Powerstat (variac type) variable
     autotransformerquestion
References: <5495c.357b8383.3dae3f6d@cs.com>
Message-ID: <000e01cdab5b$4dab0680$650aa8c0@KB6NAX>

To avoid confusion Arden adds::

The output current will remain the same but because the input voltage is
half obviously the power output (P=IE) is half.

> And KVA rating will be approximately halved. I say approximately because
the no-load input current will be halved so it will run a little bit cooler
at no-load. But priimary losses at full load will be slightly higher than
in one wound for 120V input.

In a message dated 10/15/2012 22:39:14 PM Central Daylight Time,
gumbear at pacbell.net writes:

Chuck queeries:

>I picked up for $3 at a flea market a Powerstat variable autotransformer.
Input is 240V output is 0-280 volts @3.5 amps. KVA is .98. The unit is
wired with the standard 220V plug and receptacle. Is there any reason that
I couldn't just change the plug and receptacle to a standard 120V
configuration and go ahead and use it? Obviously the dial calibration will
reflect the 240 input but that is easily compensated for. It would seem to
me that as a transformer it wouldn't care if it were looking at 120 or 240?

Am I missing something? What about the current capacity and KVA rating at 120V?

A 240 variac operating on 120 volts will work just about as well as a 120 variac. There is some more loss due to the increased resistance of a few more turns and perhaps the core is not optimal for operating at less excitation. Give it a try and report back.

Arden Allen
KB6NAX

Robert Downs - Houston
wa5cab dot com (Web Store)
MVPA 9480

From landn2 at frontier.com Tue Oct 16 03:44:27 2012
From: landn2 at frontier.com (Liles and Naomi Garcia)
Date: Tue, 16 Oct 2012 00:44:27 -0700
Subject: [BoatAnchors] Help With Hallicrafters 5T
Message-ID: <OBEDKFDGHEPDGADPPEHFKEMADPAA.landn2@frontier.com>

Good evening Everybody,

I am working on a Hallicrafters 5T that I acquired as a cardboard box case (this is similar to the proverbial basket case). I think that I have all of the parts except for the tube shields. My radio does not have the boy on its dial; it is the other one with the plain dial artwork. My plastic dial is good.

I am using a Riders schematic from the Internet. The same schematic is on the BAMA website. The schematic shows a 8 mfd and a 4 mfd in a negative-lead filtering circuit. My radio has two caps in it--each one is a dual 8 mfd cap. The caps are a little larger than a small box of wooden matches that were around many years ago. They have the " Mallory " brand on them and they were bolted to the chassis with tabs that they have. Are these original, or have they been added? There is evidence that some work has been done on the radio such as some extended wires, but the radio has not been hacked. Both sections of each cap are paralleled and are wired in where they are supposed to be.

I have cleaned up the chassis somewhat, and will be replacing the wax capacitors and checking the resistors. The power transformer needs some cleaning, and I will give it a coat of paint. It is a silver-gray color now

and I would like to paint it a similar color. Should I use a
high-temperature aluminum paint or what?

One more question is about the output tube circuit. The schematic is drawn such that the screen grid receives audio input from the 75 triode, and the control grid serves as the screen grid. I don't mean to be picky, but is this just a drawing error?

I am getting this radio working for a " Before And After " contest for our antique radio club, NorthWest Vintage Radio Society in Portland, Oregon.

Many thanks in advance for your all's help!!

Best regards from Aloha, Oregon,
Liles Garcia
landn2 at frontier.com

From mike at oldaudio.net Wed Oct 17 08:10:53 2012
From: mike at oldaudio.net (Mike Durff)
Date: Wed, 17 Oct 2012 05:10:53 -0700 (PDT)
Subject: [BoatAnchors] Black wrinkle paint ?
Message-ID: <1350475853.635.YahooMailNeo@web5710.biz.mail.ne1.yahoo.com>

Do any of you have suggestions as to readily available black wrinkle paint 1930-1940 style?

The last time I used any was 40+ years ago rebuilding time clocks. I would spray the cases then,
?bake them in a commercial oven for about an hour at 200? degrees.

Thanks, Mike

From bob at nofrowns.net Wed Oct 17 08:51:16 2012
From: bob at nofrowns.net (Bob Jackson)
Date: Wed, 17 Oct 2012 07:51:16 -0500
Subject: [BoatAnchors] Black wrinkle paint ?
References: <1350475853.635.YahooMailNeo@web5710.biz.mail.ne1.yahoo.com>
Message-ID: <297F4BD726264B63836F800AEBD1D38A@c1408123a>

You might try Krylon "Wrinkle Finish". It should be available, at least on order, from any place that carries Krylon paint. I bought mine at O'Reilly auto Parts.

73,

Bob AG5X

----- Original Message -----
From: "Mike Durff" <mike at oldaudio.net>
To: <boatanchors at theporch.com>
Sent: Wednesday, October 17, 2012 7:10 AM
Subject: [BoatAnchors] Black wrinkle paint ?

Do any of you have suggestions as to readily available black wrinkle paint
1930-1940 style?

The last time I used any was 40+ years ago rebuilding time clocks. I would
spray the cases then,
bake them in a commercial oven for about an hour at 200? degrees.

Thanks, Mike

From WA5CAB at cs.com Wed Oct 17 12:45:55 2012
From: WA5CAB at cs.com (WA5CAB at cs.com)
Date: Wed, 17 Oct 2012 12:45:55 -0400 (EDT)
Subject: [BoatAnchors] Black wrinkle paint ?
Message-ID: <12cdc.7f1f00f8.3db03ac3@cs.com>

Mike,

As recently as about two years ago, Seymour of Sycamore was still making it
in Sycamore, IL. Phone 815-895-9101. I don't know whether they have
distributors or not as I've always been a direct customer.

In a message dated 10/17/2012 07:11:18 AM Central Daylight Time,
mike at oldaudio.net writes:
> Do any of you have suggestions as to readily available black wrinkle
> paint 1930-1940 style?
>
> The last time I used any was 40+ years ago rebuilding time clocks. I would
> spray the cases then,
> bake them in a commercial oven for about an hour at 200? degrees.
>
> Thanks, Mike

Robert Downs - Houston
wa5cab dot com (Web Store)
MVPA 9480

From gsantacanav at gmail.com Wed Oct 17 20:11:13 2012
From: gsantacanav at gmail.com (Guido Santacana)
Date: Wed, 17 Oct 2012 19:41:13 -0430
Subject: [BoatAnchors] Black wrinkle paint ?
In-Reply-To: <12cdc.7f1f00f8.3db03ac3@cs.com>
References: <12cdc.7f1f00f8.3db03ac3@cs.com>
Message-ID: <CAO1yix2aCkCeadaH6hqy7cGa7NAkDmhV6zZ0X1YdjEpJhgLacA@mail.gmail.com>

I have bought spray cans of black wrinkle paint from Pep Boys in the car
paint section. They are used for motors, cure in about 24hrs and one must
practice a bit to get the correct wrinkle effect. In the end it is as good
as the original.

73s

Guido Santacana KP4FAR

On Wednesday, October 17, 2012, <WA5CAB at cs.com> wrote:
> Mike,
>
> As recently as about two years ago, Seymour of Sycamore was still making
it
> in Sycamore, IL. Phone 815-895-9101. I don't know whether they have
> distributors or not as I've always been a direct customer.
>
> In a message dated 10/17/2012 07:11:18 AM Central Daylight Time,
> mike at oldaudio.net writes:
>> Do any of you have suggestions as to readily available black wrinkle
>> paint 1930-1940 style?
>>
>> The last time I used any was 40+ years ago rebuilding time clocks. I
would
>> spray the cases then,
>> bake them in a commercial oven for about an hour at 200? degrees.
>>
>> Thanks, Mike
>
> Robert Downs - Houston
> wa5cab dot com (Web Store)
> MVPA 9480
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

>

From mike at oldaudio.net Wed Oct 17 20:32:45 2012
From: mike at oldaudio.net (Mike Durff)
Date: Wed, 17 Oct 2012 17:32:45 -0700 (PDT)
Subject: [BoatAnchors] RE Black wrinkle
Message-ID: <1350520365.36059.YahooMailNeo@web5711.biz.mail.ne1.yahoo.com>

Thanks for the replies... Seymour has it $10.80 + $16.88 shipping !
I think I'll try the auto parts store and see how that works...
MD

From arc5 at ix.netcom.com Wed Oct 17 20:49:07 2012
From: arc5 at ix.netcom.com (David Stinson)
Date: Wed, 17 Oct 2012 19:49:07 -0500
Subject: [BoatAnchors] A Young Marine "Sparks," 1921
Message-ID: <826901D6836B4D2387887B3FFABAD6B2@CompaqSR5710F>

Cool story of a 19-year-old who joined the Marines
and became a "Sparks" in January of 1921.

http://tinyurl.com/c3d57ve

Sparks, a mighty man is he
All he does is pound a key
And listen to the ships at sea
He copies weather and the press
And listens for an SOS
His rig is all shiny-bright
His hook is clear
When into port the ship does steer
He's ready for a little fun
At the finish of the run
Oh, Sparks, a mighty man is he
He helps to make it safe at sea!

By J. G. B.
Jan. 4, 1921

From bill at iaxs.net Thu Oct 18 01:17:12 2012
From: bill at iaxs.net (Bill Hawkins)
Date: Thu, 18 Oct 2012 00:17:12 -0500
Subject: [BoatAnchors] A Young Marine "Sparks," 1921
In-Reply-To: <826901D6836B4D2387887B3FFABAD6B2@CompaqSR5710F>
References: <826901D6836B4D2387887B3FFABAD6B2@CompaqSR5710F>
Message-ID: <F2460AB8779B466C8A0AC5ABCEE3D48E@system071>

Dave,

Many thanks for posting this. For me, it's like entering a time machine
to
go back to a time before elections were blatantly purchased. Well, no,
not
far back to Plutarch's time at the end of the Roman Empire.

Bill Hawkins

-----Original Message-----
From: David Stinson
Sent: Wednesday, October 17, 2012 7:49 PM

Cool story of a 19-year-old who joined the Marines
and became a "Sparks" in January of 1921.

http://tinyurl.com/c3d57ve

From WA1KBQ at aol.com Thu Oct 18 06:13:19 2012
From: WA1KBQ at aol.com (WA1KBQ at aol.com)
Date: Thu, 18 Oct 2012 06:13:19 -0400 (EDT)
Subject: [BoatAnchors] Black wrinkle paint ?
Message-ID: <54c19.5883dc44.3db1303f@aol.com>

PlastiKote #217 black wrinkle

_http://ecx.images-amazon.com/images/I/41P2f%2Beg4HL._SL500_AA300_.jpg_
(http://ecx.images-amazon.com/images/I/41P2f+eg4HL._SL500_AA300_.jpg)

Regards, Greg

In a message dated 10/17/2012 8:11:30 A.M. Eastern Daylight Time, mike at olda
udio.net writes:

Do any of you have suggestions as to readily available black wrinkle paint
1930-1940 style?

The last time I used any was 40+ years ago rebuilding time clocks. I would
spray the cases then,
bake them in a commercial oven for about an hour at 200? degrees.

Thanks, Mike

From a.b.bonds at Vanderbilt.Edu Thu Oct 18 09:53:37 2012
From: a.b.bonds at Vanderbilt.Edu (Bonds, A B)
Date: Thu, 18 Oct 2012 08:53:37 -0500
Subject: [BoatAnchors] Black wrinkle paint ?
In-Reply-To: <CAO1yix2aCkCeadaH6hqy7cGa7NAkDmhV6zZ0X1YdjEpJhgLacA@mail.gmail.com>
References: <12cdc.7f1f00f8.3db03ac3@cs.com>
     <CAO1yix2aCkCeadaH6hqy7cGa7NAkDmhV6zZ0X1YdjEpJhgLacA@mail.gmail.com>
Message-ID: <05360D81BEC7394D935D3F2F821B0EF70BE189A5F9@its-hcwnem03.ds.Vanderbilt.edu>

Note that with all wrinkle paints, the wrinkle cures best when the surface is warm. Best to do it on a sunny day or gently use a heat gun.

A. B. Bonds

-----Original Message-----
From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Guido Santacana
Sent: Wednesday, October 17, 2012 7:11 PM
To: WA5CAB at cs.com
Cc: boatanchors at theporch.com; mike at oldaudio.net
Subject: Re: [BoatAnchors] Black wrinkle paint ?

I have bought spray cans of black wrinkle paint from Pep Boys in the car paint section. They are used for motors, cure in about 24hrs and one must practice a bit to get the correct wrinkle effect. In the end it is as good as the original.

73s

Guido Santacana KP4FAR

On Wednesday, October 17, 2012, <WA5CAB at cs.com> wrote:
> Mike,
>
> As recently as about two years ago, Seymour of Sycamore was still
> making
it
> in Sycamore, IL. Phone 815-895-9101. I don't know whether they have
> distributors or not as I've always been a direct customer.
>
> In a message dated 10/17/2012 07:11:18 AM Central Daylight Time,

> mike at oldaudio.net writes:
>> Do any of you have suggestions as to readily available black wrinkle
>> paint 1930-1940 style?
>>
>> The last time I used any was 40+ years ago rebuilding time clocks. I
would
>> spray the cases then,
>> bake them in a commercial oven for about an hour at 200? degrees.
>>
>> Thanks, Mike
>
> Robert Downs - Houston
> wa5cab dot com (Web Store)
> MVPA 9480
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>

_____
BoatAnchors mailing list
BoatAnchors at theporch.com
https://minime.theporch.com/mailman/listinfo/boatanchors

From kd5byb at kd5byb.net Sun Oct 21 10:27:53 2012
From: kd5byb at kd5byb.net (Ben Hall)
Date: Sun, 21 Oct 2012 09:27:53 -0500
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
Message-ID: <50840669.9060207@kd5byb.net>

Good morning all,

On the bench is a Navy RBL-5 low-frequency receiver that I have been
working on for some time now off and on.

Early inspection noted that at least one metal can, oil-filled paper
capacitor (bathtub style) was leaking oil. They have the CAW
manufacturer marking, which per the manual corresponds to them having
been made my Aerovox Corporation.

I removed that first physically-leaky capacitor and did some tests on it
as I was curious. It was a triple 0.5uF capacitor and interestingly
even though it probably had leaked most if not all of its oil, was still
not electrically leaky. Passed leakage testing on the Heathkit C-3 cap
checker up to its rated 400 volts.

Interestingly, when I went to measure the value with the Heathkit cap
checker, I could not get a good reading. I have experienced this
before, so thought noting of it.

So I got out the Fluke 12 (modern DMM) with a capacitor measuring
function and measured it at several hundred uF instead of the rated 0.5uF.

I have measured several others in the set in-situ - they show similar
behavior on the Fluke 12.

I have one more physically leaking 0.1uF double to replace and plan to
do similar tests when I get it removed.

Anyone experienced anything similar with metal-can bathtubs?

Both the 0.5uF triple and the 0.1uF double will be replaced with modern
poly film caps on terminal boards.

thanks much and 73,
ben, kd5byb

From gumbear at pacbell.net Sun Oct 21 15:28:16 2012
From: gumbear at pacbell.net (Arden Allen)
Date: Sun, 21 Oct 2012 12:28:16 -0700
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
References: <50840669.9060207@kd5byb.net>
Message-ID: <000a01cdafc2$3dfe88e0$650aa8c0@KB6NAX>

Ben comments:

> ....Interestingly, when I went to measure the value with the Heathkit cap
checker, I could not get a good reading. I have experienced this
before, so thought noting of it.

So I got out the Fluke 12 (modern DMM) with a capacitor measuring
function and measured it at several hundred uF instead of the rated 0.5uF.

I have measured several others in the set in-situ - they show similar
behavior on the Fluke 12.

I have one more physically leaking 0.1uF double to replace and plan to
do similar tests when I get it removed.

Anyone experienced anything similar with metal-can bathtubs? ...

I guess you could say, Ben, there are cap checkers and there are cap checkers. A bridge checker like the Heathkit will not tolerate too low a shunt resistance because the bridge won't balance at some point. The problem with DMM cap checkers is their circuits are economical implementations which are good for verifying the value of essentially good capacitors and little else. The DMM checker is looking for the time it takes to charge a capacitor so obviously a leaky capacitor takes longer to charge which corresponds to a larger value capacitor. You can't beat a Sprague Tel-Ohmike for giving you the information you need with its leakage testing function. Your bathtub caps are obviously junk and your new film caps will get the RBL on to recovery.

Arden Allen
KB6NAX

I love a dog. He does nothing for political reasons.
-Will Rogers

From k4pf at juno.com Sun Oct 21 16:05:44 2012
From: k4pf at juno.com (k4pf at juno.com)
Date: Sun, 21 Oct 2012 20:05:44 GMT
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
Message-ID: <20121021.160544.3173.0@webmail06.vgs.untd.com>

Hi, Ben

I would distrust the Heath C-3 condenser checker's leakage test.
Try putting a known good capacitor across it,
say a .1uF 400V mylar and test. Now add a 1 Meg resistor across it.
Does the eye change angle? Add a second 1 Meg in parallel, and repeat.
That should give you a feeling for how sensitive the leakage test is.
You may have to add a third or fourth capacitor in parallel
to see a change.

I believe the Fluke is reading high on capacitance due to leakage
resistance being misinterpreted as capacitance.

Attached are some C-3 notes I found, by Ken Gordon W7EKB.
The C-3's resistors had changed value tremendously on the C-3's he checked.

73,
Ed Knobloch

> Ben Hall <kd5byb at kd5byb.net> wrote
<snip>
I removed that first physically-leaky capacitor and did some tests on it as I was curious. It was a triple 0.5uF capacitor and interestingly even though it probably had leaked most if not all of its oil, was still not electrically leaky. Passed leakage testing on the Heathkit C-3 cap checker up to its rated 400 volts.

Interestingly, when I went to measure the value with the Heathkit cap checker, I could not get a good reading. I have experienced this before, so thought noting of it.

So I got out the Fluke 12 (modern DMM) with a capacitor measuring function and measured it at several hundred uF instead of the rated 0.5uF.

I have measured several others in the set in-situ - they show similar behavior on the Fluke 12.

I have one more physically leaking 0.1uF double to replace and plan to do similar tests when I get it removed.

Anyone experienced anything similar with metal-can bathtubs? <snip>

From richardlo at admin.athabascau.ca Mon Oct 22 12:11:16 2012
From: richardlo at admin.athabascau.ca (Richard Loken)
Date: Mon, 22 Oct 2012 10:11:16 -0600 (MDT)
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
In-Reply-To: <20121021.160544.3173.0@webmail06.vgs.untd.com>
Message-ID: <Pine.PMDF.4.44L.1210220957590.186-100000@local.admin.athabascau.ca>

On Sun, 21 Oct 2012, k4pf at juno.com wrote:

> I would distrust the Heath C-3 condenser checker's leakage test. Try
> putting a known good capacitor across it, say a .1uF 400V mylar and test.
> Now add a 1 Meg resistor across it. Does the eye change angle? Add a
> second 1 Meg in parallel, and repeat. That should give you a feeling for
> how sensitive the leakage test is. You may have to add a third or fourth
> capacitor in parallel to see a change.

That is an interesting and useful experiment.

> I believe the Fluke is reading high on capacitance due to leakage
> resistance being misinterpreted as capacitance.

> Attached are some C-3 notes I found, by Ken Gordon W7EKB.

> The C-3's resistors had changed value tremendously on the C-3's he checked.

The notes did not make it throught the list server...

However, in defense of the C3, it is gloriously simple and any and all bad components can be found and replaced in an hour which will then yield a useful instrument for a minimal investment in time and money.

The C3 fails to notice the leakage but it also fails to provide a capacitance reading which, combined with the fact that it will read other capacitors, should tell you the capacitor is no darned good. A capacitor is a capacitor is a capacitor, if it looks at six 0.05uf capacitors and reads five out of six then you must conclude that there is something unpleasant going on in the sixth capacitor.

I don't know if modern digital capacitor meters ever say anything that is useful to a tube jockey.

--
   Richard Loken VE6BSV, Unix System Administrator : "Anybody can be a father
   Athabasca University   : but you have to earn
   Athabasca, Alberta Canada   : the title of 'daddy'"
   ** richardlo at admin.athabascau.ca **   : - Lynn Johnston

From navy.radio at gmail.com Mon Oct 22 17:44:05 2012
From: navy.radio at gmail.com (Nick England)
Date: Mon, 22 Oct 2012 14:44:05 -0700
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
In-Reply-To: <Pine.PMDF.4.44L.1210220957590.186-100000@local.admin.athabascau.ca>
References: <Pine.PMDF.4.44L.1210220957590.186-100000@local.admin.athabascau.ca>
Message-ID: <663C62F3-003B-400B-8B0E-28B5B41796FB@gmail.com>

If an open circuit is hooked up to the C-3 it shows no leakage and no capacitance. Your bad cap is roughly equal to an open circuit. Sounds like the C-3 is working fine to me.
Nick K4NYW

On Oct 22, 2012, at 9:11 AM, Richard Loken <richardlo at admin.athabascau.ca> wrote:

> On Sun, 21 Oct 2012, k4pf at juno.com wrote:
>
>> I would distrust the Heath C-3 condenser checker's leakage test. Try
>> putting a known good capacitor across it, say a .1uF 400V mylar and test.
>> Now add a 1 Meg resistor across it. Does the eye change angle? Add a

>> second 1 Meg in parallel, and repeat. That should give you a feeling for
>> how sensitive the leakage test is. You may have to add a third or fourth
>> capacitor in parallel to see a change.
>
> That is an interesting and useful experiment.
>
>> I believe the Fluke is reading high on capacitance due to leakage
>> resistance being misinterpreted as capacitance.
>
>> Attached are some C-3 notes I found, by Ken Gordon W7EKB.
>> The C-3's resistors had changed value tremendously on the C-3's he checked.
>
> The notes did not make it throught the list server...
>
> However, in defense of the C3, it is gloriously simple and any and all bad
> components can be found and replaced in an hour which will then yield a
> useful instrument for a minimal investment in time and money.
>
> The C3 fails to notice the leakage but it also fails to provide a
> capacitance reading which, combined with the fact that it will read other
> capacitors, should tell you the capacitor is no darned good. A capacitor is
> a capacitor is a capacitor, if it looks at six 0.05uf capacitors and reads
> five out of six then you must conclude that there is something unpleasant
> going on in the sixth capacitor.
>
> I don't know if modern digital capacitor meters ever say anything that is
> useful to a tube jockey.
>
> --
>   Richard Loken VE6BSV, Unix System Administrator : "Anybody can be a father
>   Athabasca University   : but you have to earn
>   Athabasca, Alberta Canada   : the title of 'daddy'"
>   ** richardlo at admin.athabascau.ca **   : - Lynn Johnston
>
> _____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors

From kd5byb at kd5byb.net Mon Oct 22 18:11:29 2012
From: kd5byb at kd5byb.net (Ben Hall)
Date: Mon, 22 Oct 2012 17:11:29 -0500
Subject: [BoatAnchors] Behavior of metal can, oil-filled paper capacitors
In-Reply-To: <50840669.9060207@kd5byb.net>
References: <50840669.9060207@kd5byb.net>
Message-ID: <5085C491.5000904@kd5byb.net>

Good evening all!

Thanks much for the replies, they are much appreciated. My notes:

1) I goofed when I wrote RBL-5. I meant to type RBA-5 but goofed.
Still, I do have an RBL-3 that I need to do some work on after I finish
the RBA. ;)

2) Heathkit C3 cap-checker. When I first got it, I remember replacing
a lot of off-spec resistors. I will open it up again and confirm that I
did do this.

3) Checking the cap-checker. One e-mail suggested a test of the
cap-checker with a known good cap and parallel "leakage" resistors to
get an idea for how sensitive the eye response it. I will also do this.

4) Improving my cap-checker situation. A Tel-Ohmike was suggested and
I'll be on the hunt for one.

5) I discovered that we have a rather nice impedance analyzer at work.
  A few caps will follow me into work this week and I'll see what the
analyzer has to say. ;)

Hopefully I'll get some time this evening to replace a few more and will
have some more "specimens" to play with. :)

thanks much and 73,
ben, kd5byb

On 10/21/2012 9:27 AM, Ben Hall wrote:
> Good morning all,
>
> On the bench is a Navy RBL-5 low-frequency receiver that I have been
> working on for some time now off and on.
>
> Early inspection noted that at least one metal can, oil-filled paper
> capacitor (bathtub style) was leaking oil. They have the CAW
> manufacturer marking, which per the manual corresponds to them having
> been made my Aerovox Corporation.
>
> I removed that first physically-leaky capacitor and did some tests on it
> as I was curious. It was a triple 0.5uF capacitor and interestingly
> even though it probably had leaked most if not all of its oil, was still
> not electrically leaky. Passed leakage testing on the Heathkit C-3 cap
> checker up to its rated 400 volts.
>
> Interestingly, when I went to measure the value with the Heathkit cap

> checker, I could not get a good reading. I have experienced this
> before, so thought noting of it.
>
> So I got out the Fluke 12 (modern DMM) with a capacitor measuring
> function and measured it at several hundred uF instead of the rated 0.5uF.
>
> I have measured several others in the set in-situ - they show similar
> behavior on the Fluke 12.
>
> I have one more physically leaking 0.1uF double to replace and plan to
> do similar tests when I get it removed.
>
> Anyone experienced anything similar with metal-can bathtubs?
>
> Both the 0.5uF triple and the 0.1uF double will be replaced with modern
> poly film caps on terminal boards.
>
> thanks much and 73,
> ben, kd5byb
> ____
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>
>

From gumbear at pacbell.net Sat Oct 27 12:52:25 2012
From: gumbear at pacbell.net (Arden Allen)
Date: Sat, 27 Oct 2012 09:52:25 -0700
Subject: [BoatAnchors] 3 inch CRT's free to good home
Message-ID: <001d01cdb463$73eee350$650aa8c0@KB6NAX>

I have three 3 inch CRT's I've salavaged from useless electronics. They all appear to have had few hours of use. Their phosphors are free of wear or burn marks, the getters appear practically new.   One is a mystery tube because its stick-on label is missing. The other two are an RCA 3RP1A and a Dumont 3JP1. Free to a good home plus shipping.

Arden Allen
KB6NAX

If you pick up a starving dog and
make him prosperous, he will not
bite you. This is the principle
difference between a dog and
a man. -Mark Twain

From kd5byb at kd5byb.net Mon Oct 29 12:08:43 2012
From: kd5byb at kd5byb.net (Ben Hall)
Date: Mon, 29 Oct 2012 11:08:43 -0500
Subject: [BoatAnchors] RBL-3 and RBA-7 Manuals
Message-ID: <508EAA0B.1010808@kd5byb.net>

Good morning all,

Put two more scanned manuals onto my webpage:

RBL-3:
<http://www.kd5byb.net/RBL/RBL-3_Manual.pdf>

RBA-7:
<http://www.kd5byb.net/RBA/RBA-7.pdf>

Both are about 60MB size. I also have an RBB/RBC-2 manual and a
RBB/RBC-5 manual to feed into the scanner.

thanks,
ben